

REMARKS

Claims 1-10 are currently pending in the application. No claims have been amended or canceled. Applicant respectfully requests reconsideration of the application in view of the following remarks.

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,621,483 to Wallace et al. ("Wallace") in view of U.S. Patent No. 5,624,117 to Ohkubo et al. ("Ohkubo") and further in view of Applicant's Admitted Prior Art ("AAPA").

Wallace teaches a device for navigating a pointer in a two-dimensional environment. The device includes an imaging surface on which a user can place a finger. A motion transducer measures the motion of a user's finger on the imaging surface. When the user removes the finger from the imaging surface, the pointer continues to move in the most recent direction and gradually decelerates until it is stopped.

Ohkubo discloses a game machine controller with keys that control the movement of an image subject displayed on a monitor screen in a three-dimensional environment. The controller comprises three separate mechanical input mechanisms, one for each degree of motion.

Independent claim 1 relates to a method of navigating in a virtual three-dimensional environment. Applicant respectfully submits that the combination of Wallace and Ohkubo fails to teach, suggest, or obviate at least one of the distinguishing features of independent claim 1, namely, applying a finger of a user to a movable physical member and navigating a step upwards in a hierarchy of commands in the virtual three-dimensional environment. In addition, the cited references fail to disclose wherein the upwards navigation is achieved by removing the finger from the movable physical member and re-applying said finger to the movable physical member within a set time. Furthermore, the cited references fail to disclose wherein the virtual three-dimensional environment comprises a hierarchically organized menu system in an electronic device.

Wallace discloses a first set of movement data that is indicative of a relative movement between an imaging surface and an optical pointing device prior to loss of contact. The first set of movement data is indicative of motion of a finger tip against the imaging surface. Wallace further discloses a controller that is adapted to generate a second set of movement data when the finger tip is removed from the imaging surface. The second set of movement data is indicative of motion of the finger tip across the imaging surface prior to removal of the finger tip. The second set of movement data causes a gradual decrease in a velocity of the screen pointer. In contrast to claim 1, the second set of movement data as disclosed in Wallace appears to be in the same direction and plane as the first set of movement data and not in a virtual three-dimensional environment. Furthermore, the second set of movement as disclosed in Wallace, is generated by the controller when the finger tip is removed from the imaging surface. In contrast, according to claim 1, upwards navigation is achieved by removing the finger from the movable physical member and re-applying the finger to the movable physical member within a set time. Wallace fails to disclose achieving upwards navigation by removing the finger and re-applying the finger within a set time as claimed. Ohkubo discloses the use of three separate depressable keys to navigate in a three-dimensional environment but fails to disclose navigating by removing a finger from the movable physical member and re-applying the finger to the movable physical member within a set time limit as claimed. In addition, Ohkubo fails to disclose a three-dimensional environment comprising a hierarchically organized menu system. Applicant respectfully submits that independent claim 1 distinguishes over the combination of Wallace and Ohkubo and respectfully requests that the rejection thereof be withdrawn.

Additionally, Applicant first respectfully submits that there is no motivation to combine Wallace and Ohkubo. Wallace teaches a device for navigating a pointer in a two-dimensional environment. Wallace provides no indication of navigating the pointer in a three-dimensional environment. Ohkubo discloses an input device which has a two-dimensional joystick. Ohkubo further discloses the use of three separate depressable keys to navigate in a three-dimensional environment or twist the device about an axis in order to achieve navigation in a three-dimensional environment.

Applicant respectfully submits that combining the use of the two-dimensional joystick and the three separate depressable keys as disclosed in Ohkubo to navigate in a three-

dimensional environment with the device for navigating a pointer in a two-dimensional environment taught by Wallace would require the user to press a separate key or twist the phone in a certain manner to move upwards in the menu structure. The combination of Wallace and Ohkubo would still require the user to press a separate key or twist the phone in a certain manner which is in contrast to the claimed invention. Therefore, there would be no motivation to combine Wallace and Ohkubo. Given the above, Applicant respectfully submits that there is no motivation to combine the teachings of Wallace and Ohkubo as suggested by the Office Action. Indeed, even if the teachings of Wallace and Ohkubo were somehow combined as suggested by the Office Action, the combination would result in a device according to Wallace with a depressable key for controlling navigation in the third dimension.

In view of the foregoing, Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness under 35 § 103(a). In order to establish such a case, each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. M.P.E.P. § 2143.03. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. *Id.* at § 2143.01. Third, a reasonable expectation of success must exist that the proposed modification will work for the intended purpose. *Id.* at § 2143.02. Here, the Examiner has failed to comply with all three requirements. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” *Id.* at § 2143.

With respect to the first requirement, Applicant respectfully submits that the combination of Wallace and Ohkubo fails to teach, suggest, or obviate each and every element recited in independent claim 1. The combination of Wallace and Ohkubo fails to disclose a hierarchy of commands in the virtual three-dimensional environment. In addition, the combination of Wallace and Ohkubo fails to disclose wherein the upwards navigation is achieved by removing the finger from the movable physical member and re-applying the finger to the movable physical member within a set time limit. Independent claim 1 embodies a method of navigating in a virtual three-dimensional environment by removing the finger from the movable physical member and re-applying said finger to the movable physical member

within a set time limit. On the contrary, the combination of Wallace and Ohkubo would still require the user to press a separate key to navigating in a virtual three-dimensional environment.

With regard to the second requirement, the Examiner has provided no proper motivation to combine Wallace and Ohkubo in the first place. The Examiner resorts to the vague and overly general statement that it would have been obvious to one having ordinary skill in the art at the time of invention to “allow movement of the input better navigation in the virtual space.” Applicant submits that such a general statement is not a proper motivation and, therefore, the Examiner has failed to establish a *prima facie* case of obviousness. *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (determinations of *prima facie* obviousness, including motivation, must be supported by a finding of “substantial evidence ”).

In particular, it is an object of the present invention to provide a method of navigating in a virtual three-dimensional environment by removing the finger from the movable physical member and re-applying said finger to the movable physical member within a set time limit. This object of the present invention is disclosed in independent claim 1. In contrast, Wallace teaches a device for navigating a pointer in a two-dimensional environment. Wallace provides no indication of navigating the pointer in a three-dimensional environment. Ohkubo discloses an input device which has a two-dimensional joystick. Ohkubo further discloses the use of three separate depressable keys to navigate in a three-dimensional environment or twist the device about an axis in order to achieve navigation in a three-dimensional environment. If the teachings of Wallace and Ohkubo were somehow combined as suggested by the Office Action, the combination would result in a device according to Wallace with a separate depressable key for controlling navigation in the third dimension which is in contrast to the claimed invention. Applicant respectfully submits that, in the absence of substantial evidence, proper motivation to combine Wallace and Ohkubo cannot be established merely by stating that the combination of Wallace and Ohkubo would be obvious.

With regard to the third requirement, Applicant respectfully submits that the Examiner has failed to establish, again on the basis of substantial evidence, that a reasonable expectation of success exists that the proposed combination will work for the intended purpose. On the contrary, Applicant respectfully submits that it was not the case that using a two-

dimensional joystick and a combination of three additional depressable keys was an obvious candidate for the design of navigating in a three-dimensional environment by removing the finger from the movable physical member and re-applying said finger to the movable physical member within a set time limit from the outset. In particular, Applicant's demonstration that it is possible to achieve navigating in a three-dimensional environment without the need for additional depressable keys is a unique feature of the present invention. Applicant respectfully submits that the motivation to use a movable physical member for navigation in a three-dimensional environment in this manner, as well as demonstration of the benefits of doing so, are found in the present invention and not in the prior art references of Wallace and Ohkubo.

For all the foregoing reasons, Applicant respectfully submits that independent claim 1 distinguishes over the cited combination of Wallace and Ohkubo. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claim 2 depends from and further restricts independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claim 2 distinguishes over the cited combination of Wallace and Ohkubo and are in condition for allowance. Withdrawal of the rejection of dependent claim 2 is respectfully requested.

Independent claim 3 relates to an electronic device. Applicant respectfully submits that the combination of Wallace and Ohkubo fails to teach, suggest, or obviate at least one of the distinguishing features of independent claim 3, namely, a movable physical member for navigating in a virtual three-dimensional environment, the movable physical member is arranged for being controlled by a finger of a user applied to a user surface of the movable physical member. In addition, Applicant respectfully submits that the combination of Wallace and Ohkubo fails to disclose a sensing means wherein the sensing means being electrically connected to a timer adapted to start counting when the finger is removed from the user surface of the movable physical member and to stop when the finger is re-applied to the user surface of the movable physical member. In contrast, Wallace discloses a sensing means connected to a friction simulator and not to a timer as claimed. Additionally, Applicant submits that claim 3 patentably distinguishes over Wallace and Ohkubo for similar reasons to those discussed above

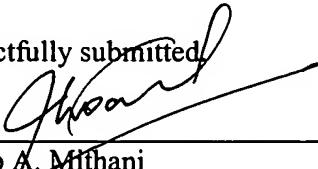
with respect to independent claim 1. Applicant respectfully requests that the rejection of independent claim 3 as unpatentable over Wallace in view of Ohkubo be withdrawn.

Dependent claims 4-10 depend from and further restrict independent claim 3 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 3, dependent claims 4-10 distinguish over the combination of Wallace and Ohkubo and are in condition for allowance. Withdrawal of the rejection of dependent claims 4-10 is respectfully requested.

In view of the above remarks, Applicant believes the pending application is in condition for allowance. A Notice to that effect is respectfully requested.

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Respectfully submitted,

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